

AG Contract No. KR95-2073-TRN
ADOT ECS File No. JPA 95-77
FCDMC IGA NO.: 95005
Project: SR 202L
Red Mountain Freeway
TRACS No.: H 0875 02C, H241401C,
H0875XXC
Section: Price Fwy.-Country Club Dr.

INTERGOVERNMENTAL AGREEMENT

BETWEEN
THE STATE OF ARIZONA
AND
THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

THIS AGREEMENT is entered into 26 APR 11 1996,
pursuant to Arizona Revised Statutes, Sections 11-951 through 11-954, as amended, between
the STATE OF ARIZONA, acting by and through its DEPARTMENT OF TRANSPORTATION
(the "STATE") and FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, acting by and
through its BOARD OF DIRECTORS (the "DISTRICT").

I. RECITALS

1. The STATE is empowered by Arizona Revised Statutes Section 28-108 to enter into this agreement and has by resolution, a copy of which is attached hereto and made a part hereof, resolved to enter into this agreement and has delegated to the undersigned the authority to execute this agreement on behalf of the STATE.

2. The DISTRICT is empowered by Arizona Revised Statutes Section 48-3603 to enter into this agreement and has by resolution, a copy of which is attached hereto and made a part hereof, resolved to enter into this agreement and has authorized the undersigned to execute this agreement on behalf of the DISTRICT.

3. As part of the construction of the SR 202L between SR 101L and SR-87 (Country Club Drive), the STATE is designing and constructing a 100-year flood protection along the south bank of the Salt River, herein after referred to as the "PROJECT" (See Exhibit A, attached hereto and made a part hereof.). The purpose of this agreement is to define the responsibilities of each party.

THEREFORE, in consideration of the mutual agreements expressed herein, it is agreed as follows:

NO. <u>20658</u>
FILED WITH SECRETARY OF STATE
Date Filed <u>04/26/96</u>
<u>James H. Hall</u> Secretary of State
By <u>Vicky Haenewald</u>

II. SCOPE OF WORK

1. The STATE will:

a. Be responsible for all costs associated with the design and construction of the 100-year flood protection of the south bank of the Salt River between SR 101L and Country Club Drive.

b. Be responsible for providing the design plans, specifications and other documents that are required for the construction of the PROJECT. Design criteria provided by the DISTRICT and shown in Exhibit "B", shall be used to design the PROJECT.

c. Provide to the DISTRICT design data, preliminary plans and specifications for the PROJECT, prior to finalization, for their review and comment. The STATE will resolve differences and/or incorporate the DISTRICT comments into the final design plans and specifications.

d. Provide to the DISTRICT a copy of all final design reports, analyses and studies and final "Record Drawings" for the PROJECT. Provide to the DISTRICT and the City of Mesa all necessary documentation as required by the Federal Emergency Management Agency (FEMA) for the delineation of the Salt River affected by the PROJECT.

e. Include the construction of the PROJECT with the earliest possible STATE contract so that the south bank protection can be completed with the SR 202L construction.

f. Acquire all necessary rights of way to construct, operate, maintain and provide legal access to the PROJECT. Obtain all federal, state, and/or local permits necessary for the implementation of the PROJECT. Acquire or provide a minimum 300' wide restrictive excavation (mining) easement along the southbank, from the stabilized embankment at the river invert within the river channel.

g. Advertise for bids and award the construction contract(s) for the PROJECT. Provide construction management and administration services for the PROJECT.

h. Upon completion of the construction and acceptance of the PROJECT by the DISTRICT, grant to the DISTRICT, sufficient easements, permits, and/or licenses, at no cost to the DISTRICT, for operation and maintenance purposes of the 100-year flood protection features constructed between SR 101L and SR-87 (Country Club Drive).

i. Be responsible for the operation and maintenance of the roadway and non-flood control protection features.

j. Coordinate with the DISTRICT any and all proposed future modifications, construction, or uses within the PROJECT and receive written concurrence from the DISTRICT. The DISTRICT shall be responsible for granting licenses or permits for all modifications, access, or construction activities within the PROJECT.

2. The DISTRICT will:

a. Provide review and comments on all designs, plans and specifications for the PROJECT that are developed by the STATE, and have the right of approval for all flood control features to be operated and maintained by the DISTRICT.

b. Monitor construction of the PROJECT and inspect and approve, in writing, the completed features the DISTRICT will be assuming for operation and maintenance.

c. Assume the operations and maintenance responsibility for the 100-year south bank flood protection features constructed between SR 101L and Country Club Drive in the Salt River, after the construction of the features is approved by the DISTRICT, in writing, and upon the granting of the necessary easements, permits and/or licenses to the DISTRICT by the STATE.

III. MISCELLANEOUS PROVISIONS

1. This agreement shall remain in force and effect until completion of said PROJECT; provided, however, that this agreement, except any provisions herein for maintenance, which shall continue for a period of forty (40) years from the effective date of this agreement, may be cancelled at any time prior to the award of a construction contract, upon thirty (30) days written notice to the other party.

2. This agreement shall become effective upon filing with the Secretary of State.

3. This agreement may be cancelled in accordance with Arizona Revised Statutes Section 38-511.

4. The provisions of Arizona Revised Statutes Section 35-214 are applicable to this contract.

5. In the event of any controversy which may arise out of this agreement, the parties hereto agree to abide by required arbitration as is set forth for public works contracts in Arizona Revised Statutes Section 12-1518.

6. All notices or demands upon any party to this agreement shall be in writing and shall be delivered in person or sent by mail addressed as follows:

Arizona Department of Transportation
Joint Project Administration
205 South 17 Avenue, Mail Drop 616E
Phoenix, AZ 85007

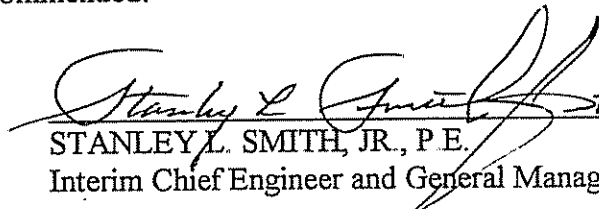
Flood Control District
of Maricopa County
Planning and Project Management
2801 W. Durango Street
Phoenix, AZ 85009

7. Attached hereto and incorporated herein is the written determination of each party's legal counsel that the parties are authorized under the laws of this state to enter into this agreement and that the agreement is in proper form.


IN WITNESS, WHEREOF, the parties have executed this agreement the day and year first above written.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Recommended:


By:  2-13-96
STANLEY L. SMITH, JR., P.E.
Interim Chief Engineer and General Manager

Approved and Accepted:

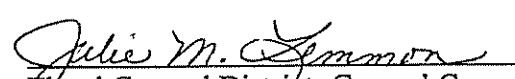
By: 
ED KING
Chairman, Board of Directors

MAR 20 1996
Date

ATTEST:

By: 
FRAN MCCARROLL
Clerk of the Board

This Intergovernmental Agreement has been reviewed pursuant to Arizona Revised Statutes 11-952, as amended, by the undersigned General Counsel, who has determined that it is in proper form and within the powers and authority granted to the Flood Control District of Maricopa County under the laws of the State of Arizona.

By:  2/14/96
Flood Control District, General Counsel Date

IN WITNESS WHEREOF, the parties have executed this agreement the day and year first above written.

STATE OF ARIZONA
Department of Transportation

By:

A handwritten signature in cursive script, appearing to read "Richard Genteman", is written over a horizontal line.


RICHARD GENTEMAN

Deputy State Engineer

RESOLUTION

BE IT RESOLVED on this 2nd day of February 1996, that I, the undersigned LARRY S. BONINE, as Director of the Arizona Department of Transportation, have determined that it is in the best interests of the State of Arizona that the Department of Transportation, acting by and through the Highways Division, to enter into an agreement with the Flood Control District of Maricopa County for the purpose of defining responsibilities for the design, construction and maintenance of flood protection from the Salt River on L-202 (Red Mountain), from the Price Freeway to Country Club Drive.

Therefore, authorization is hereby granted to draft said agreement which, upon completion, shall be submitted to the Deputy State Engineer for approval and execution.


for LARRY S. BONINE
Director

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

AGENDA INFORMATION FORM

☒ Action ☐ Presentation ☐ Presentation & Action

Agenda Number

Department: FLOOD CONTROL DISTRICT	DEPT(2) FY(2) SEQ(3) TYPE(1) EXTEN(2)
Category: OPERATIONS - INFRASTRUCTURE	C- 69 96 041 2
Contact: Richard G. Perreault	Phone: 506-4774
Return to: Dortha Klaahsen	Phone: 506-4433

Action requested:

Approve IGA FCD-95005 with the Arizona Department of Transportation (ADOT) for the design, construction and maintenance of Salt River South Bank Protection from the vicinity of the Loop 101 (Pima Freeway) crossing to Country Club Drive (SR87).

Please return an executed copy to
the Clerk of the Board of Supervisors.

Continued from Meeting of:

☒ No financial impact

Complete description of requested action: (Include, if applicable, background, impact, long-term commitment)

The bank stabilization is a continuation of the 100-year channelization constructed by ADOT in cooperation with the District and Tempe west of the Loop 101. ADOT agrees to pay all costs associated with the design, permitting and construction of the bank stabilization project, and include this construction with that of the Red Mountain Freeway in 1996/97. The District has provided the design criteria, reviewed and commented on the design plans and specifications, and will monitor construction. The District agrees to assume the maintenance responsibility for forty (40) years for the Bank Protection upon ADOT's granting of the required easements to the District.

There is no capital cost to the District. The cost to maintain the Bank Protection is included in the District's Maintenance Operating Budget.

7413 3:30 pm
RECEIVED

APR 09 1996

STATEWIDE PROJECT
MANAGEMENT

Expenditure Impact by FY(s): (Provide detail on Financial Form)

Routing & Approval (Sign & Date) (Per Responsibility of Signers Guidelines)

1. Dept. <i>[Signature]</i> 2-9-96	4. <i>[Signature]</i>	7. Mat. Mgmt. <i>[Signature]</i> 2-22-96
2. Legal <i>[Signature]</i> 2/16/96	5. <i>[Signature]</i>	8. Human Res. N/A
3. ACA <i>[Signature]</i> 2/21/96	6. <i>[Signature]</i>	9. OMB <i>[Signature]</i> 2-26-96

County Administrative Officer:

☐ Place on Agenda

[Signature]

Date:

3/11/96

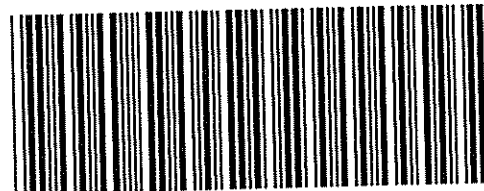
Board of Directors Action:

Clerk of the Board

☒ Approved ☐ Disapproved ☐ Amended as follows:

[Signature]
Date: *3-20-96*

When recorded mail to:



OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL

96-0201899 03/26/96 04:09

KATHERINE 17 OF 24

CAPTION HEADING: IGA Between State of Arizona
and the Flood Control Dist of
Maricopa County
C-69-96-041-2

DO NOT REMOVE

This is part of the official document.

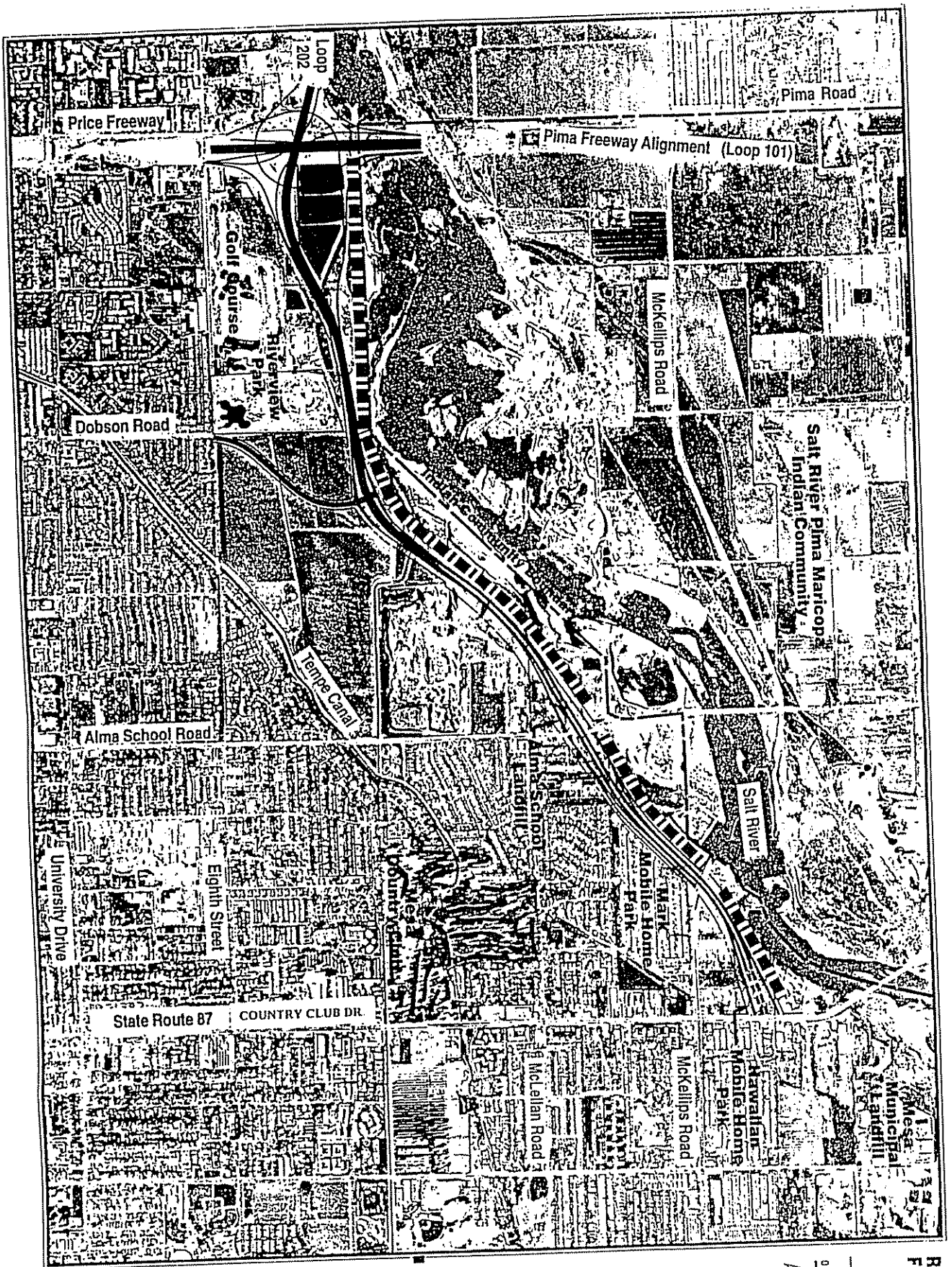
§ 11-480. Requirements for form of instruments

A. Only an instrument which upon presentation to a county recorder for recordation fails to meet any of the following conditions may be rejected for recordation at the time of presentation for recordation:

4. Effective January 1, 1991, each instrument shall be no larger than eight and one-half inches in width and no longer than fourteen inches and shall have a print size no smaller than ten point type.

5. Effective January 1, 1991, each instrument shall have at least a one-half inch margin across the bottom and the left and right sides from the top to the bottom. The first page shall have a top margin of at least two inches of vertical space from left to right and shall be reserved for recordation and return address information.

CONTACT THE RECORDER'S OFFICE IF YOU NEED FURTHER INSTRUCTIONS



**RED MOUNTAIN
FREEWAY**

0 1000 2000
feet
NORTH

BANK STABILIZATION
MAINTENANCE - APPROX.
LOCATIONS

EXHIBIT A

JPA 95-77
FCD ICA 95005

EXHIBIT "B"

JPA 95-77
FCD IGA 95005

February 3, 1994

CHANNEL DESIGN CRITERIA FOR
MAJOR WATERCOURSES*

1. All geotechnical test results shall be provided for District review. Gradation data shall be obtained that is representative of the full depth of the moveable bed. The District's rule of thumb for bore hole/test pit intervals is a minimum of one per 500 feet. If an armoring analysis is to be presented for review, gradation test results for the channel bed samples shall include the percentages of the 3 inch plus material encountered.
2. The geotechnical exploration shall determine if landfill or hazardous material deposits are present within the channel alignment, and if so, their impacts on channel design and costs.
3. If existing gravel pits are to be filled, gradation specs shall be needed for the material that is to be placed in the moveable bed zone.
4. Levees shall be designed to conform with FEMA freeboard criteria. (100-year frequency peak flow with three (3) feet of freeboard plus one (1) feet at bridges) In non-levee conditions a minimum of one (1) feet of freeboard shall be provided.
5. HEC-II shall be used to perform back water calculations, unless the District agrees to another method. A hard copy and floppy disk with input and output files shall be submitted for District review.
6. The location of cross sections used in the water surface profile calculations shall be provided on a scaled map.
7. The final plans shall include profiles showing the top of levee protection, HGL, invert, and the low chords for all bridges.
8. Tributary (side) drainage to the channel shall be addressed such that the more severe of the following conditions govern: 1) 100-year frequency peak in the main channel with 10-year frequency peak tributary drainage or 2) 10-year frequency peak in the main channel with the 100-year frequency peak tributary drainage.
9. Consideration shall be given to the upstream and downstream river and floodplain conditions and how those conditions may impact the proposed channel. Existing and potential material extraction and landfill operations shall be addressed in this context. Overbank flooding upstream of the channelization shall be analyzed to ensure that those flows enter and are contained within the improved channel. The design and analysis shall address the potential impacts of known future modifications that may be proposed by others.

* Design Criteria to be used for Flood Control District of Maricopa County designed, funded or maintained projects.

EXHIBIT "B"

10. Maintenance access and channel invert access ramps shall be incorporated into the design.
11. The scour analysis shall be performed using an analytical approach based on the velocity associated with the 100-year frequency peak flow, the depth of the thalweg, and the soil gradation of the channel bed materials.
12. Degradation and aggradation analyses shall include factors for dunes and antidunes.
13. The depth of scour, measured from the low-flow thalweg invert elevation, shall be used to determine the toe-down elevations for bank protection based on the 100-year frequency peak flow.
14. Local scour calculations shall be provided for review. These calculations are to be tabulated at all critical design locations and presented with a map showing the locations.
15. Levee slope stability analysis calculations shall be submitted for District review. The analysis shall consider pore pressure caused by rapid draw down.
16. Provide calculations to show that the type of bank protection (riprap, gabions, etc....) is suitably sized to resist hydraulic forces at the design frequency peak flow.
17. All hydraulics and structural calculations performed to substantiate the design of slope or channel stabilization shall be provided for District review.
18. All calculations shall be independently checked by a person at least as competent as the designer before submitting them to the District. Both the designer and checker shall initial and date each page of calculations that is submitted.
19. Minimum factors of safety for scour and forces on structures shall be 1.5 based on the 100-year frequency peak flow.

ANALYTICAL APPROACH FOR DETERMINING REQUIRED
TOE DEPTHS FOR BANK PROTECTION

The following analytical approach shall be utilized for determining required toe depths for bank protection:

1. Contraction Scour (includes General Scour), in the vicinity of bridge crossings and river sections that have been constricted due to landfill or any other type of encroachment shall be computed by methods described in Federal Highway Administration, FHWA, Hydraulic Engineering Circular Nos. 18 and 20, and other publications deemed appropriate for the 100-year frequency flow. General scour for

EXHIBIT :B:

unconstricted reaches, is to be quantified by computer models for flows representing a hydrological history, as described in Item 3 below, and shall be supplemented with hand calculations.

2. Bed-form scour, due to the passage of dunes or antidunes, shall be computed from analytical relationships developed by investigators such as Yalin and Kennedy, as described in textbooks on sediment transport technology. The maximum hydraulic parameters associated with the passage of a 100-year frequency peak shall be used to establish the quantitative values for this scour component.
3. Long-term Aggradation/Degradation shall be computed by using the concept of equilibrium slope or the concept of streambed armoring, depending on which approach controls the long-term channel profile. The equilibrium slope concept shall utilize a sediment transport relationship which incorporates the D_{50} and gradation of the streambed sediment. The streambed-armoring concept shall utilize the critical tractive shear stress approach and the representative (armor) particle size. A series of flood frequency hydrographs from 10 to 100-year, shall be used to represent the hydrologic history that the structure may experience in its life as a basis for determining these long-term trends. The "dominant" discharge shall generally be assumed to be the 10-year frequency discharge.

If a sediment analysis is required, the analysis shall consider the sediment load entering the study reach. If computer software is used to analyze the sediment transport, a hard copy and floppy disk with input and output files shall be submitted for District review.

4. The scour due to river bend shall be considered and added to the required bank toe depth calculation.
5. The scour due to any local obstruction (bridge pier, etc...) shall be considered and added to the required bank toe depth calculation.



STATE OF ARIZONA

OFFICE OF THE ATTORNEY GENERAL

1275 WEST WASHINGTON, PHOENIX 85007-2926

TRN Main: 542-1680

Direct: 542-8837

Fax: 542-3646

MAIN PHONE: 542-5025

TELECOPIER : 542-4085

GRANT WOODS
ATTORNEY GENERAL


INTERGOVERNMENTAL AGREEMENT DETERMINATION

A.G. Contract No. KR95-2073-TRN, an agreement between public agencies, has been reviewed pursuant to A.R.S. § 11-952, as amended, by the undersigned Assistant Attorney General who has determined that it is in the proper form and is within the powers and authority granted to the State of Arizona.

No opinion is expressed as to the authority of the remaining parties, other than the State or its agencies, to enter into said agreement.

DATED this 22nd day of April, 1996.

GRANT WOODS
Attorney General


JAMES R. REDPATH
Assistant Attorney General
Transportation Section

JRR:lsr
c:\jrr\4-iga-jh.wpd